

WHAT IS CLAIMED IS:

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1. A surface acoustic wave device comprising:  
a surface acoustic wave element; and  
a package containing the surface acoustic wave element,  
the package including a main body having an opening and a  
hollow space therein, a cover provided on the upper surface  
of the main body of the package and arranged to close the  
opening portion of the main body of the package, signal  
electrodes arranged to transmit a signal input from the  
outside of the package and a signal output from the surface  
acoustic wave element, and a grounding electrode for  
grounding an unwanted electromagnetic wave generated inside  
the package; wherein

an insulating joining material is arranged to join the  
main body of the package and the cover, a metallized  
electrode which is located above the signal electrodes and  
is not in contact with the signal electrodes and the  
insulating joining material is provided at a fixed location  
of the main body of the package, and the metallized  
electrode is arranged to be conductive to the grounding  
electrode.

2. The surface acoustic wave device according to claim  
1, wherein the package is made of one of an insulating  
material and ceramics.

3. The surface acoustic wave device according to claim  
1, wherein the main body of the package includes a substrate  
and at least one frame body provided on the periphery of the

substrate.

4. The surface acoustic wave device according to claim 3, wherein the surface acoustic wave element is fixed substantially in the center of the substrate.

5. The surface acoustic wave device according to claim 1, wherein the surface acoustic wave element is electrically connected to the grounding electrode and the signal electrodes.

6. The surface acoustic wave device according to claim 3, wherein the grounding electrode is arranged so as to connect the vicinity of the middle point of each of a pair of two facing sides on the surface of the substrate on which the surface acoustic wave element is fixed.

7. The surface acoustic wave device according to claim 1, wherein the grounding electrode is in contact with the bottom surface of the surface acoustic wave element.

8. The surface acoustic wave device according to claim 3, wherein the grounding electrode is arranged so as to continuously extend over the outside surface and bottom surface of the substrate.

9. The surface acoustic wave device according to claim 1, wherein the surface acoustic wave element is grounded by the grounding electrode such that the grounding electrode absorbs an unwanted electromagnetic wave generated by the

surface acoustic wave element.

10. The surface acoustic wave device according to claim 3, wherein the at least one frame body includes two layers defining an upper frame body and a lower frame body.

11. A surface acoustic wave device comprising:  
a surface acoustic wave element; and  
a package containing the surface acoustic wave element,  
the package made up of a main body of the package of an insulating material having a hollow space therein, a cover of an insulating material provided on the upper surface of the main body of the package and for closing the opening portion of the main body of the package, signal electrodes for transmitting a signal input from the outside of the package and a signal output from the surface acoustic wave element, and a grounding electrode for grounding an unwanted electromagnetic wave generated inside the package; wherein

the main body of the package and the cover are joined by thermocompression bonding, a metallized electrode which is located above the signal electrodes and is not in contact with the signal electrodes and the cover is provided at a fixed location of the main body of the package, and the metallized electrode is arranged to be conductive to the grounding electrode.

12. The surface acoustic wave device according to claim 11, wherein the package is made of one of an insulating material and ceramics.

13. The surface acoustic wave device according to claim 11, wherein the main body of the package includes a substrate and at least one frame body provided on the periphery of the substrate.

14. The surface acoustic wave device according to claim 13, wherein the surface acoustic wave element is fixed substantially in the center of the substrate.

15. The surface acoustic wave device according to claim 11, wherein the surface acoustic wave element is electrically connected to the grounding electrode and the signal electrodes.

16. The surface acoustic wave device according to claim 13, wherein the grounding electrode is arranged so as to connect the vicinity of the middle point of each of a pair of two facing sides on the surface of the substrate on which the surface acoustic wave element is fixed.

17. The surface acoustic wave device according to claim 11, wherein the grounding electrode is in contact with the bottom surface of the surface acoustic wave element.

18. The surface acoustic wave device according to claim 13, wherein the grounding electrode is arranged so as to continuously extend over the outside surface and bottom surface of the substrate.

19. The surface acoustic wave device according to

Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

20. The surface acoustic wave device according to claim 13, wherein the at least one frame body includes two layers defining an upper frame body and a lower frame body.